

IN THE CLAIMS:

1. (Currently Amended) A device for treating pneumothorax, tension pneumothorax, and/or hemothorax, comprising:

a trocar obturator unit comprising a stylet with a distal end and a proximal end,
wherein the proximal end of said stylet has a point for puncturing a body cavity,
and wherein a stopper is coupled to said stylet distally of said point;

a catheter assembly comprising

a tube dimensioned to receive said stylet, said tube having a lumen, an open
ended distal end portion, and at least one fluid opening through the
sidewall, and

a hub coupled with said open-ended distal end portion, wherein a lumen of
said hub is continuous with the lumen of said tube and dimensioned to
receive at least a portion of said stopper to position the stylet relative to
the catheter assembly and seal the lumens of said tube;

a one-way valve, wherein one end of said one-way valve is sealed to at least a portion
of said hub, said one-way valve being configured such that the lumen of the
one-way valve is continuous with the lumens of said tube and said hub; and

an at least one band having a first end and a second end, the first end coupled to the
hub; and

an at least one adhesively coated tab attached to said hub and configured to sealingly
secure the hub of said device to a skin of a body cavity; the at least one band, the at
least one adhesively coated tab attachable to a portion of skin near the body cavity
to mechanically affix the catheter assembly to the skin.

2. (Original) The device of Claim 1, wherein the point on the proximal end of said stylet extends beyond the proximal end portion of said tube when said stylet is inserted into said catheter assembly.

3. (Original) The device of Claim 1, wherein the diameter of said stopper is larger than the diameter of the lumen of said one-way valve.

4. (Original) The device of Claim 1, wherein at least a portion of said stopper is removably retainable in at least a portion of the hub.

5. (Original) The device of Claim 1, wherein at least one of the exterior of said stopper or the interior of said one-way valve is coated with a lubricant.

6. (Currently Amended) The device of Claim 1, wherein said trocar obturator unit ~~is~~further comprises a pull-handle attached to said stopper.

7. (Previously Presented) The device of Claim 6, wherein said pull-handle is a ring.

8. (Previously Presented) The device of Claim 6, wherein said pull-handle is a tab.

9. (Original) The device of Claim 1, wherein an annular recess is formed in the outside wall of said hub.

10. (Original) The device of Claim 1, wherein said one-way valve is secured to said hub by a retaining ring position over said one-way valve within said recess.

11. (Currently Amended) The device of Claim 9 wherein said one-way valve is secured to said hub by the at least one band unwindably positioned over said one-way valve within the recess of said hub, ~~and wherein the at least one adhesively coated tab is attached to said at least one band for securing said device to a patient.~~

12. (Original) The device of Claim 11 wherein said at least one tab includes a removable covering for maintaining said adhesive during periods of non-use.

13. (Original) The device of Claim 1, further comprising a disk coupled to said catheter assembly for securing said trocar unit to a patient.

14. (Original) The device of Claim 6, wherein at least one of said stylet, catheter assembly, one-way valve and pull-handle are comprised of a radio-opaque material.

15. (Previously Presented) The device of Claim 1, wherein said tube includes a kink-resistant tube lumen wall.

16. (Previously Presented) The device of Claim 1, wherein said the kink-resistant lumen wall includes a first coiled monofilament polymer fiber.

17. (Canceled)

18. (Original) The device of Claim 16, wherein the kink-resistant lumen wall includes a second coiled monofilament polymer fiber interwoven with the first coiled monofilament polymer fiber.

19. (Currently Amended) The device of Claim 15 wherein the kink-resistant lumen wall includes a first coiled monofilament metallic fiber.

20. (Original) The device of Claim 16, wherein the kink-resistant lumen wall includes a second coiled monofilament metallic fiber interwoven with the first coiled monofilament metallic fiber.

21. (Currently Amended) A catheter assembly for venting fluid including gasses from within a body cavity having a skin, the catheter assembly comprising:

a tube configured to sealingly engage a stylet, the tube having a tube lumen, a tube distal end defining a tube distal port, and a tube proximal end defining a tube proximal port;

a hub defining a hub lumen, the hub having a hub proximal face, a hub distal face, and the hub proximal face being sealingly attached to the tube at the tube distal port, the hub lumen configured to form a passage for fluid continuous with the tube lumen and dimensioned to receive at least a portion of a stopper on a stylet, in sealing engagement with the tube lumen;

an at least one band having a first end and a second end, the first end coupled to the hub;

an at least one adhesive film-coated tab attached to the at least one band, the at least one adhesive film-coated tab attachable to a portion of the skin near the body cavity to cause configured to draw and hold the hub proximal face of the hub in sealing engagement with to be substantially seated against the skin; and

a one-way valve, in sealing engagement with the hub distal face, the one-way valve being configured such that a one-way valve lumen is continuous the passage the hub lumen and the tube lumen form.

22. (Original) The catheter assembly of Claim 21, the assembly further comprising:

a trocar obturator unit including the stylet having a stylet distal end and a stylet proximal end, wherein the proximal end of said stylet having a point for puncturing a body cavity, and wherein a stopper is coupled to said stylet distally of said point, the stopper being configured to position the stylet relative to the catheter assembly.

23. (Original) The catheter assembly of Claim 22, wherein the point is a suitable length to extend beyond the tube proximal port when the stylet is inserted into the tube to bring the stopper into engagement with the hub.

24. (Original) The catheter assembly of Claim 22, wherein the diameter of the stopper is larger than the diameter of the one-way valve lumen.

25. (Original) The catheter assembly of Claim 22, wherein the trocar obturator unit further includes a pull-handle attached to the stopper.

26. (Original) The catheter assembly of Claim 25, wherein the pull-handle includes a ring.

27. (Original) The catheter assembly of Claim 25, wherein the pull-handle includes a tab.

28. (Original) The catheter assembly of Claim 21, wherein the hub proximal face defines an annular recess.

29. (Canceled)

30. (Currently Amended) The catheter assembly of Claim 29~~21~~, further comprising:
~~a~~an adhesive coated disk coupled to the hub.

31. (Original) The catheter assembly of Claim 21, wherein said at least one tab includes a removable covering for maintaining said adhesive during periods of non-use.

32. (Original) The catheter assembly of Claim 21, wherein at least one of the group consisting of the stylet, the tube, the hub, the one-way valve, and the pull-handle comprise a radio-opaque material.

33. (Original) The catheter assembly of Claim 21, wherein the tube includes a kink-resistant tube lumen wall.



34. (Original) The catheter assembly of Claim 21, wherein said the kink-resistant lumen wall includes a first coiled monofilament fiber.

35. (Original) The catheter assembly of Claim 34, wherein the kink-resistant lumen wall includes a second coiled monofilament fiber interwoven with the first coiled monofilament polymer fiber.

36. (Original) The catheter assembly of Claim 34, wherein the fiber includes a polymer fiber.

37. (Currently Amended) The catheter assembly of Claim 34, wherein the fiber includes a ~~metali~~metallic fiber.

38. (Original) The catheter assembly of Claim 37, wherein the metallic fiber includes stainless steel.

39. (New) The device of Claim 1, wherein the at least one band includes one side coated with an adhesive material.

40. (New) The device of Claim 1, wherein the at least one adhesively coated tab is attached to the second end of the at least one band.

41. (New) The device of Claim 1, wherein the second end of the at least one band is unwindable from the hub to extend tangentially from the hub.

42. (New) The device of Claim 41, wherein the at least one band remains wound around the hub until after the stylet has entered the body cavity.

43. (New) The device of Claim 1, wherein the hub includes an annular recess.



44. (New) The device of Claim 43, wherein the second end of the at least one band is unwindable from the recess to extend tangentially from the recess.

45. (New) The device of Claim 1, wherein the at least one adhesively coated tab maintains the catheter assembly in an operative posture without assistance from medical personnel after the at least one adhesively coated tab is attached to the portion of skin.

46. (New) The device of Claim 1, wherein the at least one band is flexible.

47. (New) The catheter assembly of Claim 21, wherein the at least one adhesive film-coated tab is attached to the second end of the at least one band.

48. (New) The catheter assembly of Claim 21, wherein the second end of the at least one band is unwindable from the hub to extend tangentially from the hub.

49. (New) The device of Claim 28, wherein the second end of the at least one band is unwindable from the annular recess of the hub to extend tangentially from the annular recess.

50. (New) The device of Claim 21, wherein the at least one adhesive film-coated tab maintains the catheter assembly in an operative posture without assistance from medical personnel after the at least one adhesive film-coated tab is attached to the portion of skin.

51. (New) The device of Claim 21, wherein the at least one band is flexible.

